

REMARKS

In the pending office action, the Examiner requested that Applicant file formal drawings to replace the informal drawings filed with the application. In response, Applicant submits the replacement drawings enclosed herein, and requests the Examiner accept the replacement drawings.

In the pending office action, the Examiner also rejected claims 1 – 5 under 35 U.S.C. §112, 1st and 2nd paragraphs. In asserting these rejections, the Examiner states that the specification does not support the amendments to the claims, which added the limitation that the GPS receiver is connected to ground when the receiver is disconnected from the antenna. As shown in the attached claim amendments, claims 1 and 2 have been amended to claim that the antenna is connected to ground when the antenna is disconnected from the receiver. As such, claims 1 – 5, and particularly claims 1 – 2, satisfy the requirements of §112, 1st and 2nd paragraphs. Applicant respectfully requests reconsideration and withdrawal of the rejections¹.

In the current office action, the Examiner rejected independent claim 6 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,107,960 to Krasner. Krasner describes a communication system comprising a combined GPS receiver 130 and cellular telephone 109. The GPS receiver 130 receives GPS signals from a satellite, while the cellular telephone 109 communicates over a wireless network according to means well known in the art. To reduce cross-interference between transmitter and

¹ Applicant also withdraws the arguments erroneously made in the previous response (dated 17 February 2004) concerning the GPS receiver being connected to ground. However, Applicant maintains the position that there is no motivation to combine Heppie (U.S. Patent Application Publication No. 2002/0003491) with Eastmond (U.S. Patent No. 6,088,337), as suggested by the Examiner in the Office Action dated 20 November 2003.

receiver circuits, Krasner teaches “disabling” the GPS receiver 130 while the cellular telephone 109 is transmitting. In one embodiment, Krasner disables the GPS receiver 130 by disconnecting the GPS receiver 130 from the GPS antenna 111 while the cellular telephone 109 is transmitting (column 7, lines 19 – 27, and column 8, lines 8 – 10). In another embodiment, Krasner uses a control signal to cause the processing circuitry in the GPS receiver 130 to ignore the GPS signals while the cellular telephone 109 is transmitting (column 7, lines 49 – 54, and column 8, lines 10 – 12). Regardless, it is important to note that in all embodiments taught by Krasner, the GPS receiver 130 is already synchronized to a GPS satellite. As such, Krasner simply teaches preventing a GPS receiver 130 from processing signals received by a GPS antenna 111 while the cellular telephone 109 is transmitting (column 3, lines 10 – 23).

Amended claim 6 claims a cellular telephone having a GPS receiver and an antenna. A switch connects the GPS receiver to the antenna while the cellular telephone is not transmitting and disconnects the GPS receiver from the antenna while the cellular telephone is transmitting. Further, claim 6 requires means in the GPS receiver for delaying the start of a satellite search until after the cellular telephone transmission is complete. As is well understood in the art, before the GPS receiver can begin receiving GPS signals from a GPS satellite, the GPS receiver must search for and find the satellite to initialize the receiver. Such receiver initialization may be prolonged if disrupted by cellular telephone transmissions. As such, the present invention describes delaying the start of the satellite search until after a cellular transmission is complete (see page 2, paragraph 0021). Because delaying the start of a satellite search, as claimed in claim 6, is wholly different from disabling a receiver, as taught by Krasner,

Krasner does not anticipate independent claim 6. Applicant respectfully requests reconsideration.

The Examiner also rejected claims 1 – 5 under 35 U.S.C. §103(a) as obvious over Krasner in view of Eastmond. However, contrary to the Examiner's assertion, there is no motivation to combine Eastmond with Krasner. Further, even if combined, the combination does not teach the claimed invention.

The Examiner asserts that Krasner discloses a method of disconnecting the GPS receiver from a common antenna, shared by the transceiver and the receiver, while the cellular telephone transceiver is transmitting. The Examiner concedes that Krasner does not teach connecting the antenna to ground while the cellular telephone transceiver is transmitting. For this teaching, the Examiner relies on Eastmond. In particular, the Examiner cites column 2, line 65 through column 3, line 5 of Eastmond, which describes grounding a second antenna to improve signal quality. It is important to note that in rejecting claim 1, the Examiner specifically relies on the fact that Krasner teaches a combined transmit and receive antenna (column 8, lines 28 – 30). As such, the Examiner relies on Krasner to teach connecting a common antenna to both the receiver and the transceiver when the transceiver is not transmitting, and disconnecting the common antenna from the receiver when the transceiver is transmitting. In order to establish an obviousness rejection, the Examiner must then rely on Eastmond to teach connecting a common transmit/receive antenna to ground while the transceiver is transmitting.

While Eastmond does describe connecting an antenna to ground, Eastmond does not describe connecting a common antenna to ground while the antenna is

disconnected from the receiver. Instead, Eastmond describes implementing spatial diversity by connecting a second antenna to ground to cause mutual coupling between the grounded second antenna and a first antenna connected to a transceiver. It is important to note that Eastmond specifically states that the second antenna is never connected to the transceiver (column 2, line 64). Because Eastmond does not describe connecting a common antenna to ground and because the grounded antenna in Eastmond is never connected to the transceiver, Eastmond is unrelated to the teachings of Krasner. As such, there is no motivation to combine the notion of grounding an antenna taught by Eastmond with the communication system taught by Krasner.

Further, even if Eastmond is combined with Krasner, the combination of Krasner with Eastmond does not teach the invention of claim 1. Claim 1 explicitly requires coupling a GPS receiver and a cellular telephone transceiver to a common antenna, and disconnecting the GPS receiver from the common antenna and connecting the common antenna to ground when the cellular telephone transceiver is transmitting. At best, the combination of Eastmond with Krasner teaches connecting a GPS receiver antenna 111 to ground while transmitting with the transceiver antenna 100, where the receiver antenna 111 and the transceiver antenna are separate antennas. Because the combination does not teach connecting a common antenna to ground when the cellular telephone transceiver is transmitting, the combination of Eastmond with Krasner does not teach each and every limitation of claim 1. For at least this reason, the obviousness rejection must be withdrawn.

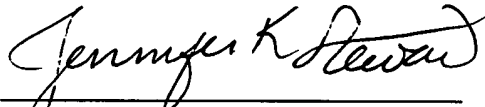
Because independent claim 1 is not obvious in view of Krasner and Eastmond, dependent claims 2 – 5 are also non-obvious. Therefore, in light of the arguments

presented above, Applicant respectfully requests the Examiner reconsider the rejection and allow claims 1 – 5.

In light of the above remarks and because the Examiner has already indicated that claims 8 – 16 are allowable, Applicant submits that claims 1 – 16 stand in condition for allowance. As such, Applicant requests the Examiner reconsider the rejections and allow the application to move forward to allowance. Should any issues remain, Applicant requests the Examiner call the undersigned so that any such issues may be expeditiously resolved.

Respectfully submitted,

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